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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,177	07/24/2003	Kuo-Pei Weng	PAT-1500	1544

7590 06/29/2006
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EXAMINER

DANIELSEN, NATHAN ANDREW

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/626,177	Applicant(s) WENG ET AL.	
	Examiner Nathan Danielsen	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-3 are pending.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al (US Patent 6,493,304; hereinafter Watanabe), in view of d'Alayer de Costemore d'Arc (US Patent 4,497,049; hereinafter d'Arc).

Regarding claim 1, Watanabe discloses a method for determining whether a disk is positioned upside down inside an optical disk player, comprising:

- a. loading a disk into an optical disk player (inherent for reading the disk) which has a focusing device (actuator 9 and converging lens 10 in figure 1);
- b. emitting a laser beam that travels via the focusing device to the loaded disk (light beam 11 in figure 1);
- c. moving the focusing device from a first position to a second position (figure 15); and
- d. while the focusing device is being moved from the first position to the second position, continuously recording the variation in the intensity of the laser beam that is reflected by the disk to produce a distribution curve of the intensity of the reflected laser beam (AS signals in figure 15).

However, Watanabe fails to disclose the step of:

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- e. determining whether the disk is upside down based on the obtained distribution curve.

In the same field of endeavor, d'Arc discloses the step of:

- e. determining whether the disk is upside down based on the obtained distribution curve (col. 2, lines 20-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have determined the orientation of an optical disk on a basis of a beam intensity, as taught by d'Arc, for the purpose of detecting if an inserted CD is upside down (col. 1, lines 27-33).

Regarding claim 2, Watanabe discloses everything claimed, as applied to claim 1.

Additionally, Watanabe discloses where step (e) further includes:

comparing the obtained distribution curve with a prescribed reference reflection intensity distribution curve to determine whether the disk is upside down (col. 15, lines 44-47 and figures 6, 15, and 16 (2); where the "no disk" state is seen to be equivalent to the disk being upside down).

Regarding claim 3, Watanabe discloses everything claimed, as applied to claim 1.

Additionally, Watanabe discloses where the method further includes, prior to step (b), the steps of:

- (i) rotating a spindle motor of the optical disk player based on a prescribed waveform (inherent for controlling the speed of rotation of the disk);
- (ii) measuring the rotation speed of the spindle motor (figure 12);
- (iii) determining that there is no disk in the optical disk player if the rotation speed of the spindle motor is greater than a preset speed of rotation within a prescribed period of time, otherwise performing step (c) (col. 27, lines 17-23 and 48-61).

Citation of Relevant Prior Art

- 5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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- a. Katsuyama et al (US Patent 4,723,234) disclose an apparatus which relies on a count of focus pull-in failures to determine that a disk has been loaded upside down;
- b. Tajiri (US Patent 5,974,014) discloses an apparatus that determines the orientation of an optical disk on the basis of non-continuity of addresses; and
- c. Kobayashi et al (JP 01-176329) disclose an apparatus that determines the orientation of an optical disk based on a focus drive comparison result.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Danielsens whose telephone number is (571) 272-4248. The examiner can normally be reached on Monday-Friday, 8:30 AM - 4:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A.L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nathan Danielsens ND
06/23/2006


THANG V. TRAN
PRIMARY EXAMINER